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EXAMINER

MATTIS, JASON E

| ART UNIT | PAPER NUMBER |
|----------|--------------|
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2665

DATE MAILED: 10/09/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/898,825

Applicant(s)

CHO, SUNG BUM

Examiner

Jason E Mattis

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☒ Claim(s) 14-15 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07/03/01 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☒ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.
2. Should applicant desire to obtain the benefit of foreign priority under 35 U.S.C. 119(a)-(d) prior to declaration of an interference, a translation of the foreign application should be submitted under 37 CFR 1.55 in reply to this action.

Drawings

3. The drawings are objected to because they are inconsistent with the specification. Page 8, paragraph 47, lines 3-4, of the detailed description refers to item 140 of Figure 2 as "a second parallel-to-serial converter 140." In the drawings, item 140 of Figure 2 is incorrectly label "Serial TO Parallel converter." This item should be labeled "Parallel TO Serial converter." A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

4. The disclosure is objected to because of the following informalities: Page 8, paragraph 47, line 2, of the detailed description incorrectly refers to "IP network interface 60." In Figure 1 of the drawings, "IP network interface" is labeled item 40, not item 60. The detailed description should state "IP network interface 40."

Appropriate correction is required.

Claim Objections

5. Claim 4 is objected to because of the following informalities: Claim 4 states, "the board is a print circuit board." In claim 1, "a monitoring board for the PSTN and a monitoring board for the IP network" are mentioned. It is unclear as to what "the board" in claim 4 refers to. Appropriate correction is required.

6. Claims 14 and 15 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1, 5 and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Krishnaswamy et al. (U.S. Pat. 5867494). Krishnaswamy et al. discloses an internet telephony gateway (See column 15 lines 51-55 of Krishnaswamy et al. for reference to the internet telephony gateway) for accessing a call between a terminal unit for a PSTN and a terminal unit for an IP network (See column 94 lines 29-61 of Krishnaswamy et al. for reference to accessing a call between a PSTN and an IP network). Krishnaswamy et al. also discloses a monitoring board 2186 for the IP network (See column 29 lines 11-12 and item 2186 of Figure 22 for reference to the IP network monitoring board) and a monitoring board for the PSTN (See column 112 lines 64-67 and column 113 lines 1-4 for reference to the PSTN monitoring board). Krishnaswamy et al. further discloses generating an alarm when a failure occurs (See column 56 lines 61-63 for reference to the alarm). Krishnaswamy et al. also discloses a method for disconnection of the call, which inherently must use a program flow to terminate the call between the PSTN and

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the IP network (See column 109 lines 25-34 of Krishnaswamy et al. for reference to the disconnection of a call).

9. Claims 11 and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Krishnaswamy et al. Krishnaswamy et al. discloses an internet telephony gateway with a PSTN interface and an internet network interface (See column 92 lines 63-67 and column 93 lines 1-30 of Krishnaswamy et al. for reference to the PSTN interface and the internet network interface). Krishnaswamy et al. also discloses generating an alarm when a failure occurs in the interfaces (See column 56 lines 61-63 of Krishnaswamy et al. for reference to the alarm). Krishnaswamy et al. further discloses a data management model 2138 (See Figure 21 item 2138 and column 38 lines 54-65 for reference to the data management model), which can be interpreted to be a data processing module. The data management model handles all transfers of information. Krishnaswamy et al. also discloses a control module (See the item labeled "call control server" in Figure 16 of Krishnaswamy et al. for reference to the control module), which performs a program flow that includes a step for termination of the call (See Figure 12 item 1218, column 109 lines 35-67 and column 110 lines 1-28 for reference to the program flow). With regards to claim 12, Krishnaswamy et al. discloses a maintenance module and call processing module, which monitors the state of calls for call processing (See column 141 lines 41-46 and item 40202 in Figure 98 for reference to the state monitor).

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Krishnaswamy et al. Krishnaswamy et al. differs from claim 4 in that Krishnaswamy et al. does not specifically disclose the monitoring boards as being a printed circuit board. PCB is old and well known in the art for simple and cost-effective implementation of a communications equipment or apparatus. One skilled in the art of communications would recognize the advantage of using PCB to implement his/her communications apparatus. It would have been obvious for one of ordinary skill in the art at the time of the invention, to manufacture the monitoring boards of Krishnaswamy et al. on a printed circuit board, with the motivation being to have a simple and cost-effective implementation of the monitoring boards.

12. Claims 2, 3, 6, 7, 9, and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Krishnaswamy et al. in view of Zelikovitz (U.S. Pat. 5761312). Krishnaswamy et al. differs from claims 2, 3, 6, 7, 9, and 10 in that Krishnaswamy et al.

does not disclose a sound with a termination message, a tone, and an announcement. Zelikovitz, in the field of communications, discloses a method of informing the user of a failure that includes an alarm and message 218 (See column 7 lines 13-20 and Figure 6 item 218 for reference to the alarm and message), which can be interpreted to be a sound, termination message, and announcement. This method has the advantage of better informing the user of the system of a failure and giving a reason for termination of the connection. It would have been obvious for one of ordinary skill in the art at the time of the invention, when presented with the work of Zelikovitz, to apply the alarm and message of Zelikovitz to the system of Krishnaswamy et al., with the motivation being to better inform the user of the system of a failure and give a reason for the termination of the connection.

13. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Krishnaswamy et al. in view of Yanosy et al. (U.S. Pat. 4792941). Krishnaswamy et al. differs from claim 13 in that Krishnaswamy et al. does not disclose a module for controlling the ejection and injection of a printed circuit board. Yanosy et al., in the field of communications, discloses a microcomputer, which can be interpreted to be a maintenance module, that controls the insertion of a printed circuit board (See column 3 lines 64-68 and column 4 lines 1-62 for reference to the microcomputer and printed circuit board insertion). The advantage of this is that changes can be made to the printed circuit board without effecting or changing the entire system. It would have been obvious for one of ordinary skill in the art at the time of the invention, when presented with the work of Yanosy et al., to apply the printed circuit board control module of

Yanosy et al. in the system of Krishnaswamy et al., with the motivation being to have the flexibility to make changes to the printed circuit board without effecting or changing the entire system.

Conclusion

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Khasnabish et al. discloses a fault detection method for use with IP telephony. Kaneko et al. discloses a system, which also includes fault detection of a telephone line.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason E Mattis whose telephone number is (703) 305-8702. The examiner can normally be reached on M-F 8AM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu can be reached on (703) 308-6602. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4700.

Jason E Mattis
Examiner
Art Unit 2665

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